

## CLAIMS

- 1 1. A method for implementing an address pool containing a plurality of unique addresses  
 2 adapted for assignment to an aggregate of a server in a computer network, the method  
 3 comprising the steps of:  
 4       collecting addresses originally assigned to physical interfaces of a network  
 5 adapter of the server;  
 6       modifying each originally assigned address by asserting a predetermined bit of the  
 7 address;  
 8       organizing the modified addresses as the address pool of unique addresses for the  
 9 aggregate; and  
 10       assigning a selected modified address from the pool as the unique address for the  
 11 aggregate.
- 1 2. The method of Claim 1 wherein each address is a medium access control (MAC) ad-  
 2 dress.
- 1 3. The method of Claim 2 wherein the predetermined bit is bit 46 of the MAC address.
- 1 4. The method of Claim 1 wherein the step of collecting comprises the step of collecting  
 2 addresses from a predetermined data structure associated with each interface.
- 1 5. The method of Claim 4 wherein the predetermined data structure describes the associ-  
 2 ated interface.
- 1 6. The method of Claim 5 wherein contents of the predetermined data structure com-  
 2 prises a type of interface and a medium access control (MAC) address assigned to the  
 3 interface.

1 7. The method of Claim 1 wherein the step of assigning comprises the step of loading a  
2 programmable device and a predetermined data structure associated with each interface  
3 with the selected modified address.

1 8. The method of Claim 7 wherein the programmable device is an application specific  
2 integrated circuit.

1 9. The method of Claim 1 further comprising the step of returning the selected modified  
2 address to the address pool upon destroying the aggregate.

1 10. A system for implementing a pool containing a plurality of modified addresses  
2 adapted for assignment to an aggregate, the system:  
3 a processor;  
4 a network adapter coupled to the processor, the network adapter including physi-  
5 cal interfaces connected to links of the aggregate;  
6 an operating system executable by the processor, the operating system comprising  
7 a virtual interface process configured to collect addresses originally assigned to the  
8 physical interfaces, the virtual interface process modifying each originally assigned ad-  
9 dress by asserting a predetermined bit of the address; and  
10 a memory coupled to the processor, the memory organized as a pool of modified  
11 addresses,  
12 wherein the virtual interface process assigns a selected modified address from the  
13 pool as a modified address for the aggregate.

1 11. Apparatus for implementing a pool containing a plurality of unique addresses adapted  
2 for assignment to an aggregate of a server, the apparatus comprising:  
3 means for collecting addresses originally assigned to physical interfaces of a net-  
4 work adapter of the server;  
5 means for modifying each originally assigned address by asserting a predeter-  
6 mined bit of the address;

7 means for organizing the modified addresses as the address pool of unique ad-  
8 dresses for the aggregate; and

9 means for assigning a selected modified address from the pool as the unique ad-  
10 dress for the aggregate.

1 12. The apparatus of Claim 11 wherein each address is a medium access control (MAC)  
2 address.

1 13. The apparatus of Claim 12 wherein the predetermined bit is bit 46 of the MAC ad-  
2 dress.

1 14. The apparatus of Claim 11 wherein the means for collecting comprises means for  
2 collecting addresses from a predetermined data structure associated with each interface.

1 15. The apparatus for Claim 11 further comprising means for returning the selected  
2 modified address to the pool upon destroying the aggregate.

1 16. A computer readable medium containing executable program instructions for imple-  
2 menting a pool containing a plurality of unique addresses adapted for assignment to an  
3 aggregate of a server, the executable program instructions comprising program instruc-  
4 tions for:

5 collecting addresses originally assigned to physical interfaces of a network  
6 adapter of the server;

7 modifying each originally assigned address by asserting a predetermined bit of the  
8 address;

9 organizing the modified addresses as the address pool of unique addresses for the  
10 aggregate; and

11 assigning a selected modified address from the pool as the unique address for the  
12 aggregate.

20. The computer readable medium of Claim 16 further comprising program instructions  
for returning the selected modified address to the address pool upon destroying the ag-  
gregate.